AMENDMENTS TO THE CLAIMS

The following amendments are made to the listing of the claims provided in the Amendment filed on November 16, 2009. The following listing of the claims is intended to replace all prior versions or listings of claims in this application. Please cancel the claims marked cancelled, without prejudice to refilling in a continuation or divisional, and amend the claims as follows:

1-23.   (Cancelled)

24.   (**Currently Amended**) A method for displaying <u>frames from</u> an in vivo image stream, said method comprising:

~~comparing at least one predetermined criterion of each of a plurality of frames to a reference image;~~

assigning a score to each of [[the]] <u>a</u> plurality of frames based on a degree of variation of [[the]] <u>a</u> predetermined criterion of each frame and [[the]] <u>a</u> reference ~~image~~ <u>frame</u>;

~~spatially positioning the frames in order of ascending or descending degree of variation based on the score assigned thereto; and~~

displaying <u>at least a subset of</u> the plurality of frames from the in vivo image stream substantially simultaneously ~~according to the spatial positioning,~~ <u>wherein the subset of frames are positioned spatially in order of ascending or descending degree of variation based on the score assigned thereto.</u>

25.   (**Previously Presented**) The method according to claim 24 comprising displaying the in vivo image stream as a multi-frame image stream.

26.   (**Previously Presented**) The method according to claim 24 comprising adjusting a rate at which the multi-frame image stream is displayed based on the content of the frames.

27.   (**Cancelled**)

28. **(Currently Amended)** The method according to claim 24 wherein the score is assigned based on a degree of color variation of the displayed ~~images~~ frames as compared to the reference ~~image~~ frame.

29. – 30. **(Cancelled)**

31. **(Previously Presented)** The method according to claim 24 comprising adjusting the size of at least one of the frames displayed based on the assigned scores.

32. **(Previously Presented)** The method according to claim 24 wherein the in vivo image stream includes frames captured from more than one image sensor.

33. **(Previously Presented)** The method according to claim 24 comprising displaying sensor data from a sensor other than an image sensor substantially simultaneously as the frames from the in vivo image stream.

34. **(Currently Amended)** A system for displaying frames of an in vivo image
    stream, the system comprising:
    an in vivo imaging device to transmit an in vivo image stream;
    a processor ~~to compare at least one predetermined criterion of each of a plurality of frames from the in vivo image stream to a reference image,~~ to assign a score to each of a plurality of frames ~~to be displayed substantially simultaneously~~ based on a degree of variation of [[the]] a predetermined criterion of each frame and [[the]] a reference ~~image~~ frame~~, to determine a spatial position of the frames to be displayed substantially simultaneously in order of ascending or descending degree of variation based on the score assigned thereto~~; and
    a display to display a multi-frame image stream, wherein each multi-frame image thereof displays at least a subset of the plurality of frames substantially simultaneously ~~in the determined spatial position,~~ wherein the subset of frames are positioned spatially in order of ascending or descending degree of variation based on the score assigned thereto.

APPLICANT(S):   MERON, Gavriel et al.
SERIAL NO.:   10/584,997
FILED: May 1, 2007
Page 4

35. **(Previously Presented)** The system of claim 34 wherein the in vivo imaging device is an autonomous capsule.

36. **(Previously Presented)** The system of claim 34 comprising a pH sensor.

37. **(Previously Presented)** The system of claim 34 wherein the score is assigned based on data detected by a sensor.

38. **(Previously Presented)** The system of claim 34 wherein the processor is to adjust the stream rate of the multi-frame image stream.

39. **(Currently Amended)** A method for displaying frames from an in vivo image stream, the method comprising:

selecting a plurality of frames from an in vivo image stream;

comparing at least one predetermined criterion of each of the plurality of frames to a reference image;

assigning a score to each of the plurality of frames based on a degree of variation of [[the]] a predetermined criterion of each frame and [[the]] a reference image frame;

spatially positioning the frames in order of ascending or descending degree of variation based on the score assigned thereto; and

displaying at least a subset of the plurality of frames substantially simultaneously according to the spatial positioning, wherein the subset of frames are positioned spatially in order of ascending or descending degree of variation based on the score assigned thereto.

40. – 41. **(Cancelled)**

42. **(Previously Presented)** The method according to claim 39 wherein at least two of the plurality of frames are displayed having different sizes.

43. (**Currently Amended**) The method according to claim 39 wherein the score is assigned based on color variation of the plurality of frames as compared to the reference ~~image~~ frame.

44. (**Currently Amended**) The method according to claim 24 wherein the reference ~~image~~ frame represents healthy tissue and wherein ~~images~~ frames having a high degree of variation with respect to the reference ~~image~~ frame are displayed to represent pathologies.

45. (**Currently Amended**) The method according to claim 24 wherein the reference ~~image~~ frame represents a pathology and wherein ~~images~~ frames having a low degree of variation with respect to the reference ~~image~~ frame are displayed.

46. (**New**) The method according to claim 24 comprising selecting or generating the reference frame.

47. (**New**) The method according to claim 46 wherein selecting or generating the reference frame is based on the frames to be displayed.

48. (**New**) The method according to claim 24 wherein the predetermined criterion is selected from the group consisting of: color, shape features, focusing, lighting, blood detection, and image content which may not be associated with a pathology.